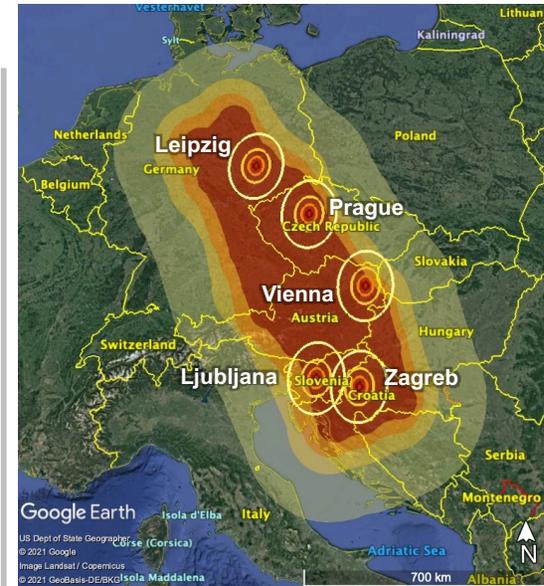


# 2021 PDC Impact Risk Summary: Day 3

## Characterization Summary & Updates

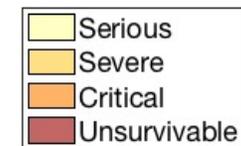
- Assessment date: 30 June 2021
- Impact date: 20 October 2021 (<4 mo.)
- Impact probability: 100%
- Diameter: mean 136 m, range ~35–500 m
- Energy: mean 136 Mt, range 0.7–3700 Mt
- Entry: 15.2–15.3 km/s, 50–55° entry angle
- Properties: unknown type or physical properties



## Damage Swath

Full range of regions potentially at risk to ground damage, given all potential impact locations and largest damage.

Sample average damage sizes over largest cities



## Hazard Summary

- Affected Population: 0–6.6M, average 580k, most likely several hundreds of thousands
- Primary hazard is airburst or impact causing blast overpressure and possibly thermal damage
- Damage radii: 0–250 km, average ~80 km
- Damage levels: minor structural damage and burns to potentially unsurvivable levels

## Affected Population Risks

